

U.S. Patent Application No. 10/649,308
Amendment dated May 30, 2007
Reply to Office Action of March 20, 2007

REMARKS/ARGUMENTS

Reconsideration and continued examination of the above-identified patent application are respectfully requested.

By this amendment, claims 1-3 and 6 are amended. Claim 4 is canceled, without prejudice or disclaimer. Full support for the amendments to the claims can be found throughout the present application including, but not limited to, claim 4 and the present application at page 5, line 11 – page 6, line 21; page 8, line 23 – page 10, line 5; and the examples, figures, and claims as originally filed. Accordingly, no questions of new matter should arise and entry of this amendment is respectfully requested.

Rejection of Claims 2 and 3 under 35 U.S.C. §112, 2nd Paragraph

At page 2, item 1, of the Office Action, the Examiner rejects claims 2 and 3 under 35 U.S.C. §112, 2nd paragraph, for alleged indefiniteness due to the phrase “determined beforehand.”

The applicant respectfully traverses this rejection, and submits that the meaning of previously determined types of inspection is adequately clear in those claims. To assist in clarifying the Examiner’s understanding of those claims, the applicant has, however, amended those claims to refer to “predetermined” types of inspection. The rejection should be withdrawn.

Rejection of Claims 1-7 and 9-11 under 35 U.S.C. §102(b) – Jacobson et al.

At page 2, item 3, of the Office Action, the Examiner rejects claims 1-7 and 9-11 under 35 U.S.C. §102(b) as being anticipated by Jacobson et al. (U.S. Patent No. 6,175,652). The applicant respectfully traverses this rejection.

With regard to claim 1, the Examiner alleges that Jacobson et al. discloses a system in the

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field of applicant's endeavor, including an image processing device for inspection by image processing of image data acquired from a camera, preliminary inspection means, and collective estimation means. Contrary to the assertions in the Office Action, Jacobson et al. fails to identically disclose the system of claim 1.

Claim 1 relates to an "image processing device for inspection by image processing of image data acquired from a camera," including features of "shot number setting means...", "preliminary inspection means for sequentially inspecting the image data acquired from the camera...", and "collective estimation means for collectively estimating the object on the basis of results of inspection of image data...". The image processing device of claim 1 in one regard can therefore provide a preliminary inspection of image data on a sequential basis, as well as a collective estimation of the image based on the results of that inspection.

The image processing device of claim 1 includes further features of "inspection item setting means for setting at least one inspection item in association with individual ones of said shots, the at least one inspection item being selectable to be different for different of said shots." According to claim 1, the "inspection item setting means" can therefore set inspection items (e.g., object position, length, etc.) for each individual image or shot. As a result, advantages of the claimed device include that sets of image data can be triggered and grouped using a set of different, selectable inspection items. Therefore, inspection items such as, merely for example, measurement of object length, orientation, or other inspection items can be adjusted during the imaging process, and different parameters of the object or objects being imaged by the camera can be analyzed. See, e.g., applicant's specification, page 6, line 28 – page 7, line 8, inter alia.

Jacobson et al. fails to identically disclose the invention of claim 1 as a whole, including an "inspection item setting means" as recited. The Office Action equates the z-axis setting of Jacobson

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et al. to an “inspection item.” Jacobson et al. relates to a rotational imaging system. Jacobson et al. appears to describe that the acquisition of a sequence of images all use just one z-axis (vertical) position, in not just one shot but throughout a sequence of rotating shots. (See, e.g., Jacobson et al., Fig. 4-2, and col. 7, line 34 – col. 10, line 18). The “inspection item” identified in Jacobson et al. is therefore fixed, and not selectable to be different for different shots within a given group of shots. The downstream image processing of Jacobson et al., in fact, appears to depend on a fixed z-axis (vertical) inspection item setting, to ensure correct alignment of a spinning object. This is again unlike the device of claim 1, which includes features of “inspection item setting means” whose “at least one inspection item” is “selectable to be different for different of said shots.”

Claim 4 is canceled. Claims 2, 3, and 5 distinguish over Jacobson et al. for at least the same reasons as claim 1 from which they depend.

Claim 6 recites an image processing method including features of a “preliminary inspection step for acquiring image data from the camera...”, and a “collective inspection step for collectively inspecting the object...”. Claim 6 further includes features of an “inspection item setting step for setting at least one inspection item in association with individual images of an object captured by a camera, the at least one inspection item being selectable to be different for different of said images.” Jacobson et al. fails to disclose or suggest any per-shot selectability of inspection items, for all reasons noted above which apply equally here. Claims 7-11 distinguish over Jacobson et al. for at least the same reasons as claim 6, from which they depend. The rejection of those claims should be withdrawn.

Rejection of Claims 8 and 11 under 35 U.S.C. §103(a) – Jacobson et al.

At page 6, item 4, of the Office Action, the Examiner rejects claims 8 and 11, under 35 U.S.C. §103(a) as being rendered obvious by Jacobson et al. Applicant respectfully traverses this

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rejection.

With regard to claim 11, the applicant respectfully assumes that inclusion of claim 11 in this section is a typographical error, since claim 11 is rejected in the preceding section under §102(b), and is not discussed in connection with this §103(a) rejection.

With regard to claim 8, the Office Action acknowledges that Jacobson et al. fails to disclose imaging of a set of identical objects contained in a box, but asserts that image processing of objects would have been obvious based on that reference. The Office Action did not take Official Notice of that type of imaging arrangement, nor did the Office Action cite any secondary reference to demonstrate that configuration in the art. Applicant respectfully submits that the rejection of claim 8 in the absence of any such cited reference or Official Notice does not form a *prima facie* case of obviousness, and in fact represents mere hindsight in view of applicant's inventive method. Applicant, moreover, respectfully submits that claim 8 furthermore distinguishes over Jacobson et al. for at least the same reasons as claim 6, from which it depends. The rejection of claim 8 is overcome, and should be withdrawn.

The Examiner is earnestly solicited to contact the undersigned to discuss this matter should the above comments not convince the Examiner of the allowability of the present subject matter.

CONCLUSION

In view of the foregoing remarks, the applicant respectfully requests the reconsideration of this application and the timely allowance of the pending claims.

If there are any fees due in connection with the filing of this response, please charge the fees to Deposit Account No. 50-0925. If a fee is required for an extension of time under 37 C.F.R. § 1.136 not accounted for above, such extension is requested and should also be charged to said

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Deposit Account.

Respectfully submitted,



Luke A. Kilyk
Reg. No. 33,251

Atty. Docket No. 3083-002
KILYK & BOWERSOX, P.L.L.C.
400 Holiday Court, Suite 102
Warrenton, VA 20186
Tel.: (540) 428-1701
Fax: (540) 428-1720